

**Y2K MARITIME ISSUES CONFERENCE**

23-24 FEB 98

*“Preparing for the Future by Building on Our Past”*

CAPT GILMOUR

**INTRO / BACKGROUND**

GOOD MORNING LADIES AND GENTLEMEN, ADMIRAL NACCARA AND DISTINGUISHED GUESTS. IT’S A PLEASURE TO BE HERE TODAY AND SPEAK ON A TOPIC WHICH WILL HAVE PERHAPS THE GREATEST IMPACT ON OUR LIVES SINCE, LET’S SAY, THE INVENTION OF BREAD. WELL MAYBE NOT BREAD, BUT IT IS PRETTY IMPORTANT AND I’LL EXPLAIN WHY.

ALMOST EVERYTHING WE USE THESE DAYS HAS AN ELECTRONIC CHIP IN IT, FROM COMPUTERS TO CLOCKS, CARS TO CALCULATORS, PAGERS TO PACEMAKERS, AND HEARING AIDS TO HIGH-POWERED JETS—NEARLY EVERYTHING.

THE MARITIME COMMUNITY IS NO DIFFERENT, WITH OUR RELIANCE ON GLOBAL POSITIONING SYSTEMS, AND AUTOMATED BRIDGE, ENGINEERING, AND CARGO MONITORING OPERATIONS.

AT TIMES IT SEEMS WE'VE CREATED MORE "GADGETS AND GOODIES" THAN WE COULD HAVE EVER IMAGINED, WHICH REMINDS ME OF THE STORY WHERE A LARGE MAINFRAME COMPUTER MAKER DISMISSED A LITTLE CONTRAPTION FROM AN UPSTART COMPUTER COMPANY BECAUSE IT WOULD NEVER SELL. WELL, LAST YEAR MORE THAN FIVE MILLION OF THESE DEVICES (AKA THE COMPUTER MOUSE) WERE SOLD IN THE US.

BETTER YET IS THE INTERNAL MEMO BY WESTERN UNION (IN 1876) WHICH PURPORTED "THE TELEPHONE HAS TOO MANY SHORTCOMINGS TO BE SERIOUSLY CONSIDERED AS A MEANS OF COMMUNICATION. THE DEVICE IS OF INHERENTLY NO VALUE TO US."

FUNNY HOW THINGS CHANGE. AND AT 12:01 ON NEW YEAR'S MORNING, YEAR 2000, THINGS WILL INDEED CHANGE. THESE DEVICES AND COMPUTER SYSTEMS (WORLDWIDE) COULD MALFUNCTION OR INCORRECTLY PROCESS INFORMATION SIMPLY BECAUSE THE DATE HAS CHANGED. UNLESS ADDRESSED, THE IMPACT OF THIS COULD BE WIDESPREAD AND COSTLY.

## Y2K PROBLEM DEFINED

SINCE ITS INCEPTION, THE COMPUTER INDUSTRY HAS USED A TWO-DIGIT NUMBER TO REPRESENT THE YEAR COMPONENT OF A DATE. FOR INSTANCE, THE YEAR 1998 IS REPRESENTED AS SIMPLY “NINE-EIGHT (9-8).” WHEN THE YEAR 2000 ARRIVES, THIS TWO-DIGIT YEAR FIELD WILL CONTAIN “ZERO-ZERO (0-0).” TO THESE COMPUTERS, THE YEAR 2000 IS INDISTINGUISHABLE FROM 1900, LIKE 2001 FROM 1901, AND SO ON. COMPUTER-GENERATED CALCULATIONS THAT AUTOMATICALLY TAKE THE HIGHER NUMBER AND SUBTRACT IT FROM THE LOWER ONE WILL RESULT IN INCORRECT CALCULATIONS.

FOR EXAMPLE, A PERSON BORN IN 1998 WILL BE VIEWED AS NINETY-EIGHT YEARS OLD, NOT TWO YEARS OLD. THE SCOPE OF THE PROBLEM IS VERY EXTENSIVE AND QUITE IMPOSING; IT ENCOMPASSES ALL COMPUTER EQUIPMENT (MAINFRAMES TO PERSONAL COMPUTERS), SOFTWARE AND MANY COMPUTERIZED PROCESSES. THIS PROBLEM HAS BEEN DUBBED THE YEAR 2000 PROBLEM, OR SIMPLY “Y2K.”

I HAVE RECENTLY REVIEWED TWO ANNUAL REPORTS FROM LARGE COMPANIES IN WHICH I HAVE MEAGERLY INVESTED. BOTH HAD A LARGE SECTION ON THE YEAR 2000 OR Y2K PROBLEM AND HOW IT AFFECTED THEIR COMPANY.

THE CONSEQUENCES ARE OBVIOUS. EFFECTIVE DATES FOR BENEFITS, LICENSE EXPIRATIONS, RETROACTIVE PAYMENTS,

AND PERSONNEL/PAYROLL TRANSACTIONS COULD ALL BE AFFECTED. IN THE FEDERAL GOVERNMENT, THE IRS' TAX SYSTEMS COULD BE UNABLE TO PROCESS RETURNS, WHICH COULD FURTHER JEOPARDIZE THE ENTIRE TAX COLLECTION SYSTEM.

WHILE I'M SURE THE PROSPECT OF CONFUSION AT THE IRS OR SOCIAL SECURITY, IRS MIGHT CAUSE RELIEF (AND PERHAPS DELIGHT) FOR SOME OF YOU, IT COULD WELL PROVE COSTLY FOR INFINITE OTHERS, ENDANGERING THE HEALTH AND WELFARE OF OUR SENIOR CITIZENS AND VETERANS WHO DEPEND UPON REGULAR ENTITLEMENTS. IN THE PRIVATE SECTOR, PENSION FUNDS, BANKS, AND COMMUNICATION SATELLITES, TOO COULD ALSO BE CRIPPLED AND UTILITY SERVICE DISRUPTED. THE LIST IS SEEMINGLY ENDLESS.

THE TIMEFRAME TO ADDRESS THIS CONDITION IS VERY REAL AND, AS SOME OF MY YOUNGER GENERATION-X STAFF WOULD SAY, VERY "IN-YOUR-FACE" NOW. UNFORTUNATELY, MANY PROFESSIONALS IN THE FIELD BELIEVE IT'S ALREADY TOO LATE. THEY ARGUE THAT SYSTEMS WILL IN-FACT "CRASH" AS WE APPROACH THE DEADLINE DUE IN PART BECAUSE--IN SIMPLEST TERMS--MANY OF THESE IMBEDDED TIMERS ARE ALREADY POSITIONED TO OPERATE OFF ELECTRONIC TRIGGERS.

THAT IS, SOME PROGRAMS MIGHT BEGIN TO PERFORM CALCULATIONS OR COMPUTATIONS 18 TO 24 MONTHS IN

ADVANCE OF THE YEAR 2000, WHICH SHOULD BE [CHECK WRISTWATCH FOR EFFECT] RIGHT ABOUT NOW.

## IMPACT / IMPORTANCE OF MARITIME COMMUNITY

SO WHAT CAN WE EXPECT IF THE U.S. MARITIME TRADE IS SUDDENLY DISRUPTED--AN INDUSTRY WHICH ALONE CARRIES MORE THAN 95% OF OUR NATION'S IMPORTS ON ITS WATERWAYS, EMPLOYS MORE THAN 1.5 MILLION PEOPLE, AND IMPACTS COUNTLESS OTHER JOBS NATIONWIDE?

OUR PORTS AND WATERWAYS ARE THE WATERBORNE EQUIVALENT OF PRESIDENT'S EISENHOWER'S INTERSTATE HIGHWAY SYSTEM, AND ARE VITAL TO OUR INTERMODAL NATIONAL TRANSPORTATION SYSTEM, AND ULTIMATELY THE NATIONAL INTEREST.

OUR SUCCESS IN THIS ENDEAVOR IS ABSOLUTELY VITAL TO THE WELL BEING OF THE NATION! OUR MARITIME TRADE AND INFRASTRUCTURE FACILITATES OUR GLOBAL OUTREACH INTO OVERSEAS MARKETS AND OUR ENGAGEMENT IN WORLD AFFAIRS, INCLUDING THE PROTECTION OF U.S. NATIONAL SECURITY INTERESTS.

THE U.S. MARITIME INFRASTRUCTURE TOUCHES ALL SEGMENTS OF OUR POPULATION FROM THE COASTAL ZONE, THROUGH OUR

INLAND WATERWAYS, INCLUDING THE WESTERN RIVERS OF OUR HEARTLAND.

EXCEPTING MEXICO AND CANADA, 95% OF OUR FOREIGN TRADE AND 25% OF OUR DOMESTIC TRADE DEPENDS ON MARITIME TRANSPORTATION. IN 1996, FOREIGN WATERBORNE COMMERCE WAS VALUED AT 900 BILLION DOLLARS AND ACCOUNTED FOR 13% OF THE NATION'S GROSS DOMESTIC PRODUCT.

AS A RESULT, SOME ECONOMISTS HAVE FORECASTED SIGNIFICANT DISRUPTIONS TO THE U.S. ECONOMY IF THE PROBLEM IS NOT PROPERLY ADDRESSED. BUT THIS IS BY NO MEANS A PURELY DOMESTIC ISSUE.

THE Y2K PROBLEM POSES A GLOBAL CHALLENGE AS WELL. EVERY ORGANIZATION, PUBLIC OR PRIVATE, SIMPLY MUST ENSURE THAT ITS INFORMATION SYSTEMS ARE FULLY Y2K COMPLIANT. FOR MANY, THE PROBLEM WILL BE THE SINGLE GREATEST PROJECT EVER TO BE MANAGED AND IMPLEMENTED BY THEIR FIRM ORGANIZATION, AND PERHAPS, THEIR BUSINESS.

AMERICAN SOCIETY HAS ALWAYS VIEWED TECHNOLOGY AS A TOOL, NOT A TABOO. FOR THIS REASON, THEY ABSOLUTELY WILL NOT TOLERATE CONSEQUENCES LIKE OIL SPILL OVERFLOWS OR GROUNDINGS BECAUSE PRECAUTIONS WEREN'T TAKEN.

THEY LOOK TO YOU AND FEDERAL AUTHORITIES, LIKE THE COAST GUARD, TO ENSURE SAFETY OF THE TRAVELLING PUBLIC AND PROTECTION OF OUR TREASURED NATURAL RESOURCES.

IT'S SIMPLY A MATTER OF SAFETY AND EFFICIENCY. WE CAN PAY NOW OR *YOU* CAN PAY LATER, WITH MUCH MORE GRAVE CONSEQUENCES I'M AFRAID. BUT WE CAN MEET THIS CHALLENGE, IN-FACT, WE MUST. IN HIS 4 FEBRUARY EXECUTIVE ORDER, PRESIDENT CLINTON DIRECTED THAT WE, AND I QUOTE "AGENCIES SHALL COOPERATE W/PRIVATE SECTOR" IN ADDRESSING THE Y2K PROBLEM AND WITH INTERNATIONAL COUNTERPARTS ... TO GENERATE COOPERATIVE INTERNATIONAL ARRANGEMENTS."

TO SOME DEGREE, I SUPPOSE WE'VE BEEN HERE BEFORE. NATIONAL AND EVEN INTERNATIONAL PARTNERS IN ACCOMPLISHING A GREAT CHALLENGE, LINKED BY A COMMON GOAL. AN EXAMPLE INCLUDES OUR PROGRESS IN DEVELOPING TODAY'S MODERN SHIPPING CONTAINERS, FROM THOSE EARLY DAYS OF THE LATE 1960S (WITH IMCO AND THE SOLAS WORK GROUP ON CONTAINER OPERATIONS), TO CONTINUED IMPROVEMENTS BY THE INTERNATIONAL MARITIME ORGANIZATIONS (IMO).

BACK THEN, SOME OF US MIGHT RECALL THE FORMIDABLE CHALLENGES IN DESIGNING AND BUILDING THE RIGHT SHIPS, THE RIGHT TRUCKS AND RIGHT PORTS, EACH OF WHICH REQUIRED COORDINATION AND COMMUNICATION ACROSS THE ENTIRE INDUSTRY.

## SUMMARY IN DETAIL

<b>RIGHT SHIPS:</b> MARITIME SHIPBUILDERS & SHIPBUILDER'S COUNCIL
<b>RIGHT TRUCKS:</b> INLAND & ROAD TRANSPORTATION SERVICE PROVIDERS
<b>RIGHT PORTS:</b> PORT COMMISSIONS AND RELATED PARTIES
(NUMEROUS OTHER EXAMPLES ABOUND)

MORE RECENTLY, WE'VE PARTNERED TO ACCOMPLISH THE MANDATES OF THE OIL POLLUTION ACT OF 1990, AND THROUGH A NUMBER OF ONGOING EFFORTS IN FORMAL PARTNERSHIPS WITH THE AMERICAN WATERWAYS OPERATORS, PASSENGER VESSEL ASSOCIATION, INTERNATIONAL COUNCIL OF CRUISE LINES, AND SPILL CONTROL ASSOCIATION OF AMERICA.

I REALIZE SOME OF YOU MAY BE THINKING "ALL RIGHT YOU FOLKS IN GOVERNMENT HAVE USED THIS CHICKEN LITTLE / SKY IS FALLING APPROACH BEFORE. IN FACT I HAD A FRIEND IN INDUSTRY WHO SAID..... YOU MIGHT SAY WE'VE BEEN THERE, HEARD THAT." TO WHICH I RESPOND, FINE. DON'T TAKE MY WORD FOR IT.

### CONFERENCE AGENDA - A LOOK AHEAD

YESTERDAY, YOU HEARD FROM SOME OF INDUSTRY'S FOREMOST EXPERTS ON THE Y2K PROBLEM, INCLUDING THE COAST GUARD'S OWN DIRECTOR OF INFORMATION AND TECHNOLOGY, REAR ADMIRAL GEORGE NACCARA AND CAPT JOHN SCHRINNER ON COAST GUARD ENFORCEMENT WILL WORK. TODAY YOU WILL HEAR MORE ON BOTH NATIONAL AND INTERNATIONAL



PROBLEMS AND SOLUTIONS. WHILE DISCUSSING Y2K IN GENERAL, THESE SPEAKERS WILL PROVIDE SPECIFIC ADVICE AND GUIDANCE IN DEALING WITH THE EFFECTS ON THE MARITIME INDUSTRY.

ALTHOUGH WE MUST LOOK AT ALL MARINE RELATED SYSTEMS, FROM PAYROLL TO AUTOMATED CARGO LOADING AND STABILITY, WE NEED TO PAY PARTICULAR ATTENTION TO THOSE CRITICAL SAFETY SYSTEMS THAT COULD SPELL DISASTER IF THEY DON'T PERFORM CORRECTLY. SYSTEMS SUCH AS STEERING GEAR, MAIN PROPULSION AND NAVIGATION SYSTEMS SHOULD BE A PRIMARY CONCERN. WE MUST BE SURE THESE SYSTEMS IN PARTICULAR AND ALL SYSTEMS IN GENERAL WORK ON JANUARY 1, 2000.

OUR COMMITMENT TO THE Y2K PROBLEM, AND THOSE OF FELLOW FEDERAL AND STATE AGENCIES, IS STRONG. EARLIER I MENTIONED THE IRS. IN TESTIMONY TO THEIR CONTINUED PERSISTENCE ON THIS ISSUE, IRS COMMISSIONER ROSSOTTI WAS RECENTLY QUOTED (THIS PAST WEDNESDAY) IN THE WALL STREET JOURNAL AS SAYING THE Y2K PROBLEM "CAN BE SOLVED AND *WILL* BE SOLVED." HE WAS, NO DOUBT, COUNTING ON THE CREATIVE RESOURCES, TALENTS AND SUPPORT OF PEOPLE LIKE YOU.

ON THAT POINT, I CHALLENGE EACH OF YOU TO LISTEN CAREFULLY AND ASK YOURSELVES THESE QUESTIONS:

- WHAT HAVE WE DONE SO FAR TO ESTIMATE THE EFFECTS OF Y2K UPON OUR OPERATIONS, BOTH SHIP AND ASHORE, AMONG OUR SUPPLIERS, AND OUR CUSTOMERS?
- HOW HAVE OUR SUPPLIERS ADDRESSED THE Y2K PROBLEM AS INPUTS TO OUR OPERATIONS, AND HOW CAN WE MITIGATE OR MINIMIZE THE IMPACTS OF A LIKELY PROBLEM?
- WHAT CONTINGENT OR ALTERNATIVE BACKUP ARRANGEMENTS ARE IN PLACE TO ACCOMMODATE OUR CUSTOMERS IN THE EVENT Y2K PROVES MORE BURDENSOME THAN PREDICTED?

I'M SURE YOU CAN THINK OF MANY OTHER QUESTIONS UNIQUE TO YOUR OWN SITUATION. HOWEVER, UNLIKE THE LONG-TERM DEVELOPMENT OF SHIPPING CONTAINERS, WE DON'T HAVE THE LUXURY OF TIME ON OUR SIDE. AND UNFORTUNATELY, EVERYTHING MUST BE CHECKED.

IN CLOSING, I WANT TO AGAIN THANK YOU ALL FOR ATTENDING, AND FOR SUPPORTING THIS MOST-IMPORTANT FORUM. THANK YOU.